



Final Regulation Agency Background Document

Approving authority name	State Air Pollution Control Board
Primary action	9 VAC 5-20-206
Secondary action(s)	9 VAC 5-40, Articles 36, 37, 42, 48, 49, 50 and 53
Regulation title	Regulations for the Control and Abatement of Air Pollution
Action title	VOC and NO _x Emission Control Areas (Rev. D04)
Document preparation date	June 30, 2006

This information is required for executive review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act, Executive Orders 21 (2002) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

Brief Summary

Please provide a brief summary of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation. Also alert the reader to changes made to the regulation since publication of the proposed.

Currently, Chapter 40 of the Regulations for the Control and Abatement of Air Pollution contains a number of rules used to enforce control measures designed to attain and maintain the ozone air quality standard. The geographic applicability of these rules is defined by establishing VOC and NO_x emissions control areas (in a list located in 9 VAC 5-20-206 of Chapter 20).

Most of the provisions of these rules are being expanded into the new 8-hour ozone nonattainment areas. Accordingly, 9 VAC 5-20-206 is being amended to establish new Fredericksburg NO_x and VOC Emissions Control Areas and to expand the Richmond and Hampton Roads VOC and NO_x Emissions Control Areas to include those counties and cities in the corresponding new 8-hour ozone nonattainment areas that were not previously listed in 9 VAC 5-20-206.

Most of these Chapter 40 rules contain, in the applicability section, the following statement: "The provisions of this article apply to sources of volatile organic compounds in volatile organic compound emissions control areas designated in 9 VAC 5-20-206." Therefore the provisions of these rules will automatically apply within all of the new VOC emissions control areas.

Some Chapter 40 rules (specifically, Articles 4, 36, 37 and 53) have provisions that apply only to certain existing VOC and NO_x emissions control areas. Each of these rules are being amended individually in order to manage the extension of applicability of these provisions to the additional VOC and NO_x emission control

areas with coherence and consistency. Article 4 is being amended to ensure that VOC RACT is not required from large VOC sources in the new areas within the expanded Richmond VOC Emissions Control Area. Article 36 (Packaging and Publishing Rotogravure Printing, and Flexographic Printing) is being amended to add appropriate exemptions for small facilities in those VOC emissions control areas that currently have no such exemptions. Article 37 (Storage or Transfer of Petroleum Liquids) is being amended to ensure that Stage II vapor recovery is not required at gasoline dispensing stations in the new areas within the expanded Richmond VOC Emissions Control Area. Article 37 is also being amended to remove applicability redundancies resulting from this change and from a previous amendment that added the Western VOC Emissions Control Area. Article 53 (Lithographic Printing) is being amended to apply in all VOC emissions control areas instead of just in the Northern Virginia and Richmond VOC Emissions Control Areas. Article 53 is also being amended to provide appropriate exemptions for small facilities in the newly applicable VOC emissions control areas.

Other Chapter 40 regulations were originally adopted to apply only within the Northern Virginia VOC Emissions Control Area. Most of these rules will be expanded to apply in the Fredericksburg 8-hour ozone nonattainment area. Accordingly, the following Chapter 40 regulations are being amended to apply within the new Fredericksburg VOC Emissions Control Area in addition to the Northern Virginia VOC Emissions Control Area: Article 42 (Portable Fuel Containers), Article 48 (Mobile Equipment Repair and Refinishing), Article 49 (Architectural and Industrial Maintenance Coatings), and Article 50 (Consumer Products).

For most of the facilities that will be subject to new or more stringent VOC emission standards as a result of this amendment, compliance is automatically required by 9 VAC 5-40-20 to be achieved either within 90 days or one year after the effective date of the amendment, depending on whether or not the source is required to make certain physical or process changes to the facility to comply. For affected facilities that will be subject to new or more stringent VOC emission standards under Article 53, compliance will be required no later than one year after the effective date of the amendment. Persons affected by the extension of the provisions of Articles 42, 48, 49 and 50 to the new Fredericksburg VOC Emission Control Area must comply by January 1, 2008.

The proposal was changed to limit the expansion of Portable Fuel Containers (Article 42), Mobile Equipment Repair and Refinishing (Article 48), Architectural and Industrial Maintenance Coatings (Article 49), and Consumer Products (Article 50) to the Fredericksburg VOC Emissions Control Area, and to ensure that Stage II vapor recovery requirements are not extended into the new areas incorporated into the Richmond VOC Emissions Control Area. Additional changes were made to Chapter 40, Article 49 and to Chapter 20 (documents incorporated by reference) to add standards for six new specialty architectural and industrial maintenance coating categories that were inadvertently omitted from the original regulation. Changes were also made to Chapter 40, Article 50 to provide for the use of an additional form of automotive windshield washing fluid consumer product that was omitted from the original regulation and to correct some typographical errors.

Statement of Final Agency Action

Please provide a statement of the final action taken by the agency including (1) the date the action was taken, (2) the name of the agency taking the action, and (3) the title of the regulation.

On June 21, 2006, the State Air Pollution Control Board adopted final amendments to regulations entitled "Regulations for the Control and Abatement of Air Pollution", specifically VOC and NO_x Emission Control Areas (9 VAC Chapter 20, Section 206). The regulation amendments are to be effective on as specified by the Administrative Process Act.

Legal Basis

Please identify the section number and provide a brief statement relating the content of the statutory authority to the specific regulation adopted. Please state that the Office of the Attorney General has certified that the agency has the statutory authority to adopt the regulation.

Section 10.1-1308 of the Virginia Air Pollution Control Law (Title 10.1, Chapter 13 of the Code of Virginia) authorizes the State Air Pollution Control Board to promulgate regulations abating, controlling and prohibiting air pollution in order to protect public health and welfare. Written assurance from the Office of the Attorney General that the State Air Pollution Control Board possesses the statutory authority to promulgate the proposed regulation amendments is available upon request.

Purpose

Please provide a statement explaining the rationale or justification of the proposal as it relates to the health, safety or welfare of citizens.

The purpose of 9 VAC 5-20-206 is to list those areas in which additional emission standards are applicable in order to attain and maintain air quality standards that are designed for the protection of public health and welfare.

The purpose of the VOC emissions standards is to limit emissions of air pollution that contribute to ambient air concentrations of ground-level ozone to the level necessary for (i) the protection of public health and welfare, and (ii) the attainment and maintenance of the air quality standards.

These amendments are being made to modify the VOC and NO_x emission control areas so that they include all of the areas that have been designated as nonattainment, thereby extending to those areas the benefit of those VOC emission standards that are designed to limit ground-level ozone formation, thereby better protecting the public health and welfare in those areas.

Substance

Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. A more detailed discussion is required under the "All Changes Made in this Regulatory Action" section.

1. The VOC and NO_x emissions control areas designated in 9 VAC 5-20-206 are being amended so that those regulations that are used to enforce control measures designed to attain and maintain the ozone air quality standard are implemented within the new ozone nonattainment areas. A new Fredericksburg VOC and NO_x Emissions Control Area is being created that consists of the County of Spotsylvania and the City of Fredericksburg. The Richmond VOC and NO_x Emissions Control Areas are being expanded to include the County of Prince George and the City of Petersburg. The Hampton Roads VOC and NO_x Emissions Control Areas are being expanded to include the counties of Gloucester and Isle of Wight.

2. Many of the Chapter 40 VOC emission standards will be extended into the new 8-hour nonattainment areas automatically when the VOC emissions control areas in 9 VAC 5-20-206 are amended. For new affected facilities subject to these rules, compliance with the VOC emission standards is automatically required by 9 VAC 5-40-20 to be achieved no later than 90 days after the effective date of the amendment except for sources that require certain physical or process changes to comply, in which case compliance is required no later than one year after the effective date of the amendment. These automatically extended rules include:

Article 5	Synthesized Pharmaceutical Products Manufacturing Operations
Article 6	Rubber Tire Manufacturing Operations
Article 11	Petroleum Refinery Operations
Article 24	Solvent Metal Cleaning Operations Using Non-Halogenated Solvents
Article 25	Volatile Organic Compound Storage and Transfer Operations
Article 26	Large Appliance Coating Application Systems
Article 27	Magnet Wire Coating Application Systems
Article 28	Automobile and Light Duty Truck Coating Application Systems
Article 29	Can Coating Application Systems
Article 30	Metal Coil Coating Application Systems
Article 31	Paper and Fabric Coating Application Systems
Article 32	Vinyl Coating Application Systems
Article 33	Metal Furniture Coating Application Systems
Article 34	Miscellaneous Metal Parts and Products Coating Application Systems
Article 35	Flatwood Paneling Coating Application Systems
Article 37	Petroleum Liquid Storage and Transfer Operations
Article 39	Asphalt Paving Operations

3. Other Chapter 40 regulations are being amended to apply (or not apply) within the appropriate VOC emissions control areas:

Chapter 40, Article 4 is being amended to ensure that VOC RACT is not automatically required of all large VOC sources in the new areas that were included in Richmond VOC Emissions Control Area to make it correspond with the expanded Richmond (marginal) 8-hour Ozone Nonattainment Area.

Chapter 40, Article 36 is being amended to provide exemptions for small publication and packaging printing rotogravure, and flexographic printing operations with a potential to emit less than 100 tons of VOC per year within all VOC emissions control areas other than the Northern Virginia VOC Emissions Control Area instead of just in the Richmond and Hampton Roads VOC Emissions Control Areas.

Chapter 40, Article 37 is being amended to ensure that Stage II vapor recovery requirements for gas stations will not be extended into the new areas in the Richmond VOC Emissions Control Area (Petersburg and Prince George County). Article 37 is also being amended to change the basis for applicability of Stage I vapor recovery provisions from nonattainment areas and maintenance areas to VOC emissions control areas.

Chapter 40, Article 42 (Portable Fuel Containers), Article 48 (Mobile Equipment Repair and Refinishing), Article 49 (Architectural and Industrial Maintenance Coatings), and Article 50 (Consumer Products) are being amended so that the provisions apply in the new Fredericksburg VOC Emissions Control Area in addition to the Northern Virginia VOC Emissions Control Area.

Chapter 40, Article 49 is being amended to add standards for six new specialty coating categories: calcimine recoaters, concrete retarders, conversion varnishes, impacted immersion coatings, nuclear coatings, and thermoplastic rubber coatings and mastic.

Chapter 40, Article 50 is being amended to allow the higher VOC automotive windshield washer fluid standards to be applied to some manual automotive windshield washing systems also, so that they may be used in winter.

Chapter 40, Article 53 is being amended to apply to lithographic printing operations in all VOC emissions control areas instead of just in the Northern Virginia and Richmond VOC Emissions Control Areas. The regulation is also being amended to provide exemptions for small facilities with a potential to emit less than 100 tons of VOC per year in the newly applicable VOC emissions control areas (i.e. the Hampton Roads, Western and Fredericksburg VOC Emissions Control Areas).

The 90-day/one-year compliance schedule of 9 VAC 5-40-20 also applies to new affected facilities that are being made subject to VOC emission standards under Articles 36. Persons affected by the extension of the provisions of Articles 42, 48, 49, and 50 to the Fredericksburg VOC Emission Control Area must comply by January 1, 2008. Compliance for affected facilities now subject to VOC emission standards under Article 53 will be required no later than one year after the effective date of the amendment.

Issues

Please identify the issues associated with the proposed regulatory action, including: (1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; (2) the primary advantages and disadvantages to the agency or the Commonwealth; and (3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please indicate.

1. Public: The primary advantage to the public is that the adoption of these regulations will significantly decrease emissions of VOCs and the resultant formation of ground-level ozone within the new 8-hour ozone nonattainment areas, thus benefiting public health and welfare. The regulated community may suffer some adverse financial impact as a result of these amendments. There may be some facilities that will have to install or upgrade emissions control equipment. There will be some additional emission control requirements and increased costs associated with the manufacture and distribution of compliant coatings and consumer products. These increased costs may be passed on to the public in the form of price increases.

2. Department: The department will benefit from a better understanding of air emissions from these areas, and will benefit from more accurate long- and short-term air quality planning though the state overall. There is a disadvantage to the department in that more sources will have to be inspected for noncompliant products, resulting in an increased workload.

Changes Made Since the Proposed Stage

Please describe all changes made to the text of the proposed regulation since the publication of the proposed stage. For the Registrar’s office, please put an asterisk next to any substantive changes.

Section number	Requirement at proposed stage	What has changed	Rationale for change
9 VAC 5 Chapter 20			
21 E 4 a.	Documents incorporated by reference.	Two new ASTM standards added.	Needed for new “nuclear coatings” definition in Chapter 40, Article 49.
Article 37 of 9 VAC 5 Chapter 40			
*5200 B 2.	Applicability of Stage II vapor recovery provisions were automatically extended to the new areas in the Richmond VOC Emissions Control Area (Petersburg and Prince George County).	Applicability is limited in the Richmond VOC Emissions Control Area to those areas in which Stage II is already implemented, which will not include the new areas in the Richmond VOC Emissions Control Area (Petersburg and Prince George County).	Stage II is redundant technology with the implementation of onboard vapor recovery systems in new automobiles. Costs were determined to be excessive for diminishing emissions reductions.
Article 42 of 9 VAC 5 Chapter 40			
*5700 B, C and D.	Applicability was extended to new Fredericksburg VOC Emissions Control Area and to the expanded Richmond VOC Emissions Control Area.	Applicability is extended only to the Fredericksburg VOC Emissions Control Area, not to the Richmond VOC Emissions Control Area.	Use of this control measure has been determined to be necessary for maintaining air quality in the new Fredericksburg VOC Emissions Control Area, but has not been determined to be necessary in the Richmond VOC Emissions Control Area.
5750 A.	Compliance schedules.	Compliance date for Richmond VOC Emissions Control Area removed.	No longer needed.
Article 48 of 9 VAC 5 Chapter 40			
*6970 B	Applicability was extended to new Fredericksburg VOC Emissions Control Area and to the expanded Richmond VOC Emissions Control Area.	Applicability is extended only to the Fredericksburg VOC Emissions Control Area, not to the Richmond VOC Emissions Control Area.	Use of this control measure has been determined to be necessary for maintaining air quality in the new Fredericksburg VOC Emissions Control Area, but has not been determined to be necessary in the Richmond VOC Emissions Control Area.
7050 A	Compliance schedules.	Compliance date for Richmond VOC Emissions Control Area removed.	No longer needed.

Article 49 of 9 VAC 5 Chapter 40			
*7120 B and C	Applicability was extended to new Fredericksburg VOC Emissions Control Area and to the expanded Richmond VOC Emissions Control Area.	Applicability is extended only to the Fredericksburg VOC Emissions Control Area, not to the Richmond VOC Emissions Control Area.	Use of this control measure has been determined to be necessary for maintaining air quality in the new Fredericksburg VOC Emissions Control Area, but has not been determined to be necessary in the Richmond VOC Emissions Control Area.
*7130 C	Terms Defined.	Definitions of "ASTM", and six specialty coatings area are added ("calimine recoater", concrete surface retarder", "conversion varnish", "impacted immersion coating", "nuclear coating" and "thermoplastic rubber coating and mastic").	Standards for these specialty coatings are necessary in order to be consistent with other states in the Ozone Transport Region (OTR).
*7140 B	Standards for VOC.	Standards for the six new specialty coatings are added and provisions made for excluding them from standards that apply to the more general specialty coating categories.	Standards for these specialty coatings are necessary in order to be consistent with other states in the Ozone Transport Region (OTR).
7210.	Compliance schedules.	Compliance date for Richmond VOC Emissions Control Area removed.	No longer needed.
Article 50 of 9 VAC 5 Chapter 40			
*7240 B.	Applicability was extended to new Fredericksburg VOC Emissions Control Area and to the expanded Richmond VOC Emissions Control Area.	Applicability is extended only to the Fredericksburg VOC Emissions Control Area, not to the Richmond VOC Emissions Control Area.	Use of this control measure has been determined to be necessary for maintaining air quality in the new Fredericksburg VOC Emissions Control Area, but has not been determined to be necessary in the Richmond VOC Emissions Control Area.
*7260 C.	Definitions.	Definition of "automotive windshield washer fluid" is amended to include fluid packaged as manual wipes for the purpose of maintaining driver visibility and safety.	Necessary to provide for manual windshield fluid wipes with VOC content high enough to prevent freezing during winter.
7270 A.	Standards for VOC.	The standard for medium volatility nonaerosol antiperspirants is amended from 10% to 0% VOC.	Correct typographical error in original regulation.
7300 D 2.	Administrative requirements.	The reference to the list of product information that must	Correct typographical error in original regulation.

		be clearly displayed on product packaging is amended.	
7330.	Compliance schedules.	Compliance date for Richmond VOC Emissions Control Area removed.	No longer needed.
7360 E 2 e.	Notifications, records and reporting.	The accuracy of the perchloroethylene or methylene chloride content that must be reported annually is amended from "the nearest 10%" to "the nearest 0.10%."	Correct typographical error in original regulation.

Public Comment

Please summarize all public comment received during the public comment period following the publication of the proposed stage, and provide the agency response. If no public comment was received, please so indicate.

A summary and analysis of the public testimony, along with the basis for the decision of the Board, is attached.

All Changes Made in this Regulatory Action

Please detail all changes that are being proposed and the consequences of the proposed changes. Detail new provisions and/or all changes to existing sections.

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change and rationale
9 VAC 5 Chapter 20, Part I			
21 E 4 a	21 E 4 a (21) and (22)	None.	Added two ASTM standards to the documents incorporated by reference. Necessary to complete the new definition of "nuclear coatings" in Chapter 40, Article 49.
9 VAC 5 Chapter 20, Part II			
None.	206 1 b.	None.	Added a new Fredericksburg VOC Emissions Control Area consisting of Spotsylvania County and Fredericksburg City and renumbered subsequent subdivisions. Necessary to implement VOC regulations within the Fredericksburg 8-hour Ozone Nonattainment Area.
206 1 b.	206 1 c.	Lists the counties and cities in the Richmond VOC Emissions Control Area.	Added two areas to the Richmond VOC Emissions Control Area: Prince George County and Petersburg City. Necessary to implement VOC regulations within the Richmond 8-hour Ozone Nonattainment Area.

206 1 d.	206 1 e.	Lists the counties and cities in the Western VOC Emissions Control Area.	Re-numbered.
None.	206 2 b.	None.	Added a new Fredericksburg NO _x Emissions Control Area consisting of Spotsylvania County and Fredericksburg City and renumbered subsequent subdivisions. Necessary to implement NO _x regulations within the Fredericksburg 8-hour Ozone Nonattainment Area.
206 2 b.	206 2 c.	Lists the counties and cities in the Richmond NO _x Emissions Control Area.	Added two areas to the Richmond NO _x Emissions Control Area: Prince George County and Petersburg City. Necessary to implement NO _x regulations within the Richmond 8-hour Ozone Nonattainment Area.
206 2 c.	206 2 d.	Lists the counties and cities in the Hampton Roads NO _x Emissions Control Area.	Added two areas to the Hampton Roads NO _x Emissions Control Area: Gloucester County and Isle of Wight County. Necessary to implement NO _x regulations within the Hampton Roads 8-hour Ozone Nonattainment Area.
206 2 d.	206 2 e.	Lists the counties and cities in the Western NO _x Emissions Control Area.	Re-numbered.
9 VAC 5, Chapter 40, Part II, Article 4			
300 B.		Applies the provisions of this article to the larger facilities in the Northern Virginia and Richmond VOC Emissions Control Areas.	Limited the Richmond VOC Emissions Control Area to the cities and counties that were in it before the areas VOC emissions control areas were amended. Determined not to be necessary to maintain air quality in the Richmond VOC Emissions Control Area.
9 VAC 5, Chapter 40, Part II, Article 36			
Title.		“Flexographic, Packaging Rotogravure, and Publication Rotogravure Printing Lines (Rule 4-36)”	Adds the phrase “Emission Standards for” to the title. Necessary to continue the process of standardizing the titles of Chapter 40 articles.
5060 D.		Exempts small facilities (those with a potential to emit less than 100 tons of VOC per year) from the flexographic and rotogravure printing VOC emission standards in the Richmond and Hampton Roads VOC Emissions Control Areas.	Exempts facilities with a potential to emit of 100 tons per year or less in <u>all</u> VOC emission control areas other than Northern Virginia. Necessary to add small facility exemptions for facilities in the recently promulgated Western VOC Emissions Control Area and in the new Fredericksburg VOC Emissions Control Area.
9 VAC 5, Chapter 40, Part II, Article 37			
5200 B.		Lists four exception categories for applicability of Emission Standards For Petroleum Liquid Storage and Transfer Operations (Rule 4-37).	Truncates the exception list to three categories. Necessary to accommodate the changes described below.

5200 B 1.		Removes Botetourt County, Frederick County and Winchester City from applicability for provisions for emission standards for all gasoline bulk loading, both Stage I and II gasoline station dispensing, and tanker truck vapor recovery.	Removes the exemption for Stage II gasoline dispensing emission standards for these areas, since the provisions for Stage II are only applicable in the Richmond and Northern Virginia VOC Emissions Control Areas and not in those areas listed. Necessary to remove redundancy from the regulation.
5200 B 2.		Stage II vapor recovery requirements are applicable throughout the Richmond VOC Emissions Control Area.	Stage II vapor recovery requirements will not be implemented in the new areas within the Richmond VOC Emissions Control Area (Petersburg and Prince George County). Necessary to avoid implementing a costly redundant technology that has diminishing emissions reductions over time.
5200 B 3.		This applicability exception restricts applicability of the emission standards to the ozone nonattainment areas listed in 9 VAC 5-20-204, the maintenance areas listed in 9 VAC 5-20-203, the county of Roanoke, and the cities of Salem and Roanoke.	Deleted. With the reestablishment of the Richmond and the Hampton Roads VOC Emissions Control Areas, the recent establishment of the Western VOC Emissions Control Area, and the new Fredericksburg VOC Emissions Control Area, all ozone nonattainment areas, maintenance areas, and the listed county and cities are all covered by VOC emissions control areas applicable under subsection B. Necessary to remove redundancy from the regulation.
5200 B 4.	5200 B 3.	Applies the provisions of the VOC emissions standards for bulk loading to gasoline bulk terminals in Bedford County, which is not in any of the VOC emissions control areas.	Renumbered.
9 VAC 5, Chapter 40, Part II, Article 42			
Title.		“Emission Standards for Portable Fuel Container Spillage in the Northern Virginia Volatile Organic Compound Emissions Control Area (Rule 4-42).”	Generalizes the title by removing reference to the Northern Virginia VOC Emissions Control Area. Necessary to make the title consistent with the new, broader applicability of the regulation to the Fredericksburg VOC Emissions Control Area.
5700 B.		Limits applicability of the regulation to sources and persons in the Northern Virginia VOC Emissions Control Area.	Broadens the applicability of the regulation so that the provisions are also applicable to sources and persons in the Fredericksburg VOC Emissions Control Area. Necessary to attain and maintain the ozone air quality standards in the corresponding nonattainment areas.
5700 C.		Exempts portable fuel containers and spouts manufactured for shipment, sale and use	Broadens the exemption so that portable fuel containers and spouts are exempt if they are manufactured for shipment, sale and use outside of all three of the applicable VOC

		outside of the Northern Virginia VOC Emissions Control Area.	emissions control areas: the Northern Virginia, Fredericksburg VOC Emissions Control Area. Necessary to be consistent with the broader applicability of the regulation.
5700 D.		Exempts manufacturers and distributors of portable fuel containers or spouts from the provisions of the regulation providing that they can demonstrate: (i) that the product is intended for shipment and use outside the Northern Virginia VOC Emissions Control Area, and (ii) that they have taken reasonable precautions to assure it is not distributed within the Northern Virginia VOC Emissions Control Area.	Broadens the exemption so that manufacturers and distributors are exempt only if they can demonstrate that the products are intended for shipment and use outside both applicable VOC emission control areas (Northern Virginia and Fredericksburg VOC Emissions Control Areas) and have taken reasonable precautions to assure it. Necessary to be consistent with the broader applicability of the regulation.
5740 E.		Provides a sell-through provision for products manufactured before the January 1, 2005 compliance date applicable to the Northern Virginia VOC Emissions Control Area.	Ties the sell-through provision to the compliance dates as they are amended in section 5750. Necessary to keep the sell-through dates consistent with the amended compliance date provisions.
5750 A.		Provides a firm January 1, 2005 compliance date for affected persons in the Northern Virginia VOC Emissions Control Area.	Provides a new compliance date of January 1, 2008 for affected persons in the newly applicable Fredericksburg VOC Emissions Control Area. Necessary to ensure that affected persons have time to comply with applicable provisions.
9 VAC 5, Chapter 40, Part II, Article 48			
Title.		“Emission Standards for Mobile Equipment Repair and Refinishing Operations in the Northern Virginia Volatile Organic Compound Emissions Control Area (Rule 4-48).”	Generalizes the title by removing reference to the Northern Virginia VOC Emissions Control Area. Necessary to make the title consistent with the new, broader applicability of the regulation to the Fredericksburg VOC Emissions Control Areas.
6790 B.		Limits applicability of the regulation to sources and persons in the Northern Virginia VOC Emissions Control Area.	Broadens the applicability of the regulation so that the provisions are also applicable to sources and persons in the Fredericksburg VOC Emissions Control Area. Necessary to attain and maintain the ozone air quality standards in the corresponding nonattainment areas.
7050		Provides a firm January 1, 2005 compliance date	Provides a new compliance date of January 1, 2008 for affected persons in the newly

		for affected persons in the Northern Virginia VOC Emissions Control Area.	applicable Fredericksburg VOC Emissions Control Area. Also adds "affected facilities" to the compliance schedule in addition to "affected persons". Necessary to ensure that affected persons and facilities have time to comply with applicable provisions.
9 VAC 5, Chapter 40, Part II, Article 49			
Title.		"Emission Standards for Mobile Architectural and Industrial Maintenance Coatings in the Northern Virginia Volatile Organic Compound Emissions Control Area (Rule 4-49)."	Generalizes the title by removing reference to the Northern Virginia VOC Emissions Control Area. Necessary to make the title consistent with the new, broader applicability of the regulation to the Fredericksburg VOC Emissions Control Area.
7120 B.		Limits applicability of the regulation to sources and persons in the Northern Virginia VOC Emissions Control Area.	Broadens the applicability of the regulation so that the provisions are also applicable to sources and persons in the Fredericksburg VOC Emissions Control Area. Also deletes a reference to "sources" to match the applicability statement in subsection A. Necessary to attain and maintain the ozone air quality standards in the corresponding nonattainment areas.
7120 C 1.		Exempts architectural coatings sold or manufactured for use exclusively outside of the Northern Virginia VOC Emissions Control Area. Also exempts architectural coatings sold or manufactured for shipment to other manufacturers for reformulation or packaging.	Broadens the exemption so that architectural coatings are exempt if they are manufactured for use exclusively outside of both of the applicable VOC emissions control areas: the Northern Virginia and Fredericksburg VOC Emissions Control Areas. Necessary to be consistent with the broader applicability of the regulation.
7130 C, Terms Defined		See below.	See below.
"ASTM."		None.	Added a new definition. Necessary to reference the proper document for defining "nuclear coatings."
"Calcimine recoater."		None.	Added new definition. Necessary to assign a standard to this new coating category.
"Concrete surface retarder."		None.	Added new definition. Necessary to assign a standard to this new coating category.
"Conversion varnish."		None.	Added new definition. Necessary to assign a standard to this new coating category.
"Impacted immersion coating."		None.	Added new definition. Necessary to assign a standard to this new coating category.
"Nuclear coating."		None.	Added new definition. Necessary to assign a standard to this new

			coating category.
"Thermoplastic rubber coating and mastic."		None.	Added new definition. Necessary to assign a standard to this new coating category.
7140 B.		Provides VOC content standards for default and specific coating categories (in Table 4-49A) and a list of coating categories that do not have to comply with the most strict of two standards that may apply.	Adds standards for six new specialty coating categories, changes the applicability of the "varnishes" coating category standard so that it does not apply to "conversion varnishes," and adds four of the new coating categories to the list of categories that do not have to comply with the lower VOC content standard of a more general coating category that may apply. Necessary in order to be consistent with similar regulations in other states in the Ozone Transport Region (OTR).
7140 C.		Provides a sell-through provision for products manufactured before the January 1, 2005 compliance date applicable to the Northern Virginia VOC Emissions Control Area.	Ties the sell-through provision to the compliance dates as they are amended in section 7210. Necessary to keep the sell-through dates consistent with the amended compliance date provisions.
7120		Provides a firm January 1, 2005 compliance date for affected persons in the Northern Virginia VOC Emissions Control Area.	Provides a new compliance date of January 1, 2008 for affected persons in the newly applicable Fredericksburg VOC Emissions Control Area. Necessary to ensure that affected persons and facilities have time to comply with applicable provisions.
9 VAC 5, Chapter 40, Part II, Article 50			
Title.		"Emission Standards for Consumer Products in the Northern Virginia Volatile Organic Compound Emissions Control Area (Rule 4-50)."	Generalizes the title by removing reference to the Northern Virginia VOC Emissions Control Area. Necessary to make the title consistent with the new, broader applicability of the regulation to the Richmond and Fredericksburg VOC Emissions Control Areas.
7240 B.		Limits applicability of the regulation to sources and persons in the Northern Virginia VOC Emissions Control Area.	Broadens the applicability of the regulation so that the provisions are also applicable to sources and persons in the Fredericksburg VOC Emissions Control Area. Necessary to attain and maintain the ozone air quality standards in the corresponding nonattainment areas.
7250 A.		Exempts consumer products manufactured for shipment, and use outside of the Northern Virginia VOC Emissions Control Area.	Broadens the exemption so that consumer products are exempt if they are manufactured for shipment and use outside of all of the applicable VOC emissions control areas designated in 9 VAC 5-40-7240: the Northern Virginia, Richmond and Fredericksburg VOC Emissions Control Areas. Necessary to be consistent with the broader

			applicability of the regulation.
7250 B.		Exempts manufacturers or distributors of consumer products from the provisions of the regulation providing that they can demonstrate: (i) that the product is intended for shipment and use outside the Northern Virginia VOC Emissions Control Area, and (ii) that they have taken reasonable precautions to assure it is not distributed within the Northern Virginia VOC Emissions Control Area.	Broadens the exemption so that manufacturers and distributors are exempt only if they can demonstrate that the products are intended for shipment and use outside all of the areas designated in 9 VAC 5-40-7240 (Northern Virginia, Richmond and Fredericksburg VOC Emissions Control Areas) and have taken reasonable prudent precautions to assure it. Necessary to be consistent with the broader applicability of the regulation.
7260 C, Terms Defined.		See below.	See below.
“Automotive Windshield Washer Fluid”		Defines the term to exclude all glass and general cleaners except those applied through a motor vehicle windshield washing system.	Broadens the term to include fluids pre-packaged as a manual wipe that is designed specifically to restore or maintain driver visibility, and excludes all manual wipes designed for other uses. Necessary to provide a standard for manual windshield wipes with a VOC content high enough to prevent freezing during winter.
“Enforceable sales.”		Defines the term in terms of sales within the Northern Virginia VOC Emissions Control Area for the purpose of determining compliance with an enforceable Alternative Compliance Plan (ACP).	Broadens the area in which ACP enforceable sales are determined to include all of the applicable areas designated in 9 VAC 5-40-7240 (Northern Virginia and Fredericksburg VOC Emissions Control Areas). Necessary to be consistent with the broader applicability of the regulation.
“Enforceable sales record.”		Defines the types of records that may be used to document sales of consumer products within the Northern Virginia VOC Emissions Control Area for the purpose of determining compliance with an enforceable ACP.	Broadens the area in which ACP enforceable sales records are used, to include all of the applicable areas designated in 9 VAC 5-40-7240 (Northern Virginia and Fredericksburg VOC Emissions Control Areas). Necessary to be consistent with the broader applicability of the regulation.
“Gross sales.”		Defines the sales that represent the total sales of the ACP consumer product within Northern Virginia VOC Emissions Control Area.	Broadens the area in which total sales of the ACP product are calculated, to include all of the applicable areas designated in 9 VAC 5-40-7240 (Northern Virginia and Fredericksburg VOC Emissions Control Areas). Necessary to be consistent with the broader applicability of the regulation.
“Gross sales”,		Defines one method for	Broadens the area in which total sales of the

subdivision 1.		determining gross sales of the ACP product by apportioning sales based upon population of the Northern Virginia VOC Emissions Control Area.	ACP product are calculated, to include all of the applicable areas designated in 9 VAC 5-40-7240 (Northern Virginia and Fredericksburg VOC Emissions Control Areas). Necessary to be consistent with the broader applicability of the regulation.
“One-product business.”		Defines one type of candidate for an ACP in terms of sales of a product in the Northern Virginia VOC Emissions Control Area.	Broadens the area in which sales of the ACP product are determined, to include all of the applicable areas designated in 9 VAC 5-40-7240 (Northern Virginia and Fredericksburg VOC Emissions Control Areas). Necessary to be consistent with the broader applicability of the regulation.
7270 A.		Provides a firm January 1, 2005 compliance date for compliance with the consumer product VOC content limits in Table 4-50A for affected persons in the Northern Virginia VOC Emissions Control Area.	Ties the compliance date for the VOC content limits to the compliance dates as they are amended in section 7330 thereby provides a new compliance date of January 1, 2008 for affected persons in the newly applicable Fredericksburg VOC Emissions Control Areas. Necessary to ensure that affected persons and facilities have time to comply with applicable provisions and to ensure consistency with other compliance dates in this Article.
7270 A, Table 4-50A.		Provides VOC content standards for default and specialty coating categories.	Amends the VOC content standard for nonaerosol antiperspirants that contain medium volatility organic compounds (MVOC) from 10% to 0%. Necessary to correct a typographical error.
7270 D.		Provides a firm delayed compliance date (January 1, 2006) with the VOC content limits in Table 4-50A for consumer products registered under FIFRA for affected persons in the Northern Virginia VOC Emissions Control Area.	Ties the delayed compliance date for the VOC content limits for FIFRA-registered products to one-year after the compliance dates as they are amended in section 7330 and thereby provides a new compliance date of January 1, 2008 for affected persons in the newly applicable Fredericksburg VOC Emissions Control Area. Necessary to ensure that affected persons and facilities have time to comply with applicable provisions and to ensure consistency with other compliance dates in this Article.
7270 E 1.		Provides a firm compliance date of January 1, 2005 for the special requirements for charcoal lighter materials for affected persons in the Northern Virginia VOC Emissions Control Area.	Ties the compliance date for the special requirements for charcoal lighter materials to the compliance dates as they are amended in section 7330 and thereby provides a new compliance date of January 1, 2008 for affected persons in the newly applicable Fredericksburg VOC Emissions Control Area. Necessary to ensure that affected persons and facilities have time to comply with applicable provisions and to ensure consistency with other compliance dates in this Article.
7270 F 3.		Provides a firm	Ties the compliance date for these special

		compliance date of January 1, 2005 affecting the sale and manufacture of aerosol adhesive products containing methylene chloride, perchloroethylene and trichloroethylene for affected persons in the Northern Virginia VOC Emissions Control Area.	requirements for aerosol adhesive products to the compliance dates as they are amended in section 7330 and thereby provides a new compliance date of January 1, 2008 for affected persons in the newly applicable Fredericksburg VOC Emissions Control Area. Necessary to ensure that affected persons and facilities have time to comply with applicable provisions and to ensure consistency with other compliance dates in this Article.
7270 G.		Provides a firm compliance date of January 1, 2005 for the special requirements for floor wax strippers for affected persons in the Northern Virginia VOC Emissions Control Area.	Ties the compliance date for the special requirements for floor wax strippers to the compliance dates as they are amended in section 7330 and thereby provides a new compliance date of January 1, 2008 for affected persons in the newly applicable Fredericksburg VOC Emissions Control Area. Necessary to ensure that affected persons and facilities have time to comply with applicable provisions and to ensure consistency with other compliance dates in this Article.
7300 D.		Provides a firm compliance date of January 1, 2005 for consumer product labeling requirements for affected persons in the Northern Virginia VOC Emissions Control Area.	Ties the compliance date for the consumer product labeling requirements to the compliance dates as they are amended in section 7330 and thereby provides a new compliance date of January 1, 2008 for affected persons in the newly applicable Fredericksburg VOC Emissions Control Area. Necessary to ensure that affected persons and facilities have time to comply with applicable provisions and to ensure consistency with other compliance dates in this Article.
7300 D 2.		Provides additional instruction and clarification for properly labeling aerosol adhesives.	Corrects the reference for which information must be clearly displayed on the label for aerosol adhesives. Necessary to correct a typographical error.
7330.		Provides a firm compliance date of January 1, 2005 for affected persons in the Northern Virginia VOC Emissions Control Area.	Provides a new compliance date of January 1, 2008 for affected persons in the newly applicable Fredericksburg VOC Emissions Control Areas. Necessary to ensure that affected persons and facilities have time to comply with applicable provisions.
7360 E 2.		Provides a reporting requirement for consumer products containing methylene chloride and perchloroethylene sold in calendar years between 2005 and 2010, inclusive.	Ties the first year of sales to be reported to compliance dates as they are amended in section 7330 and thereby provides for reporting the first year of sales for affected persons in the newly applicable Fredericksburg VOC Emissions Control Area that is consistent with the new compliance date for those areas (January 1, 2008). Necessary to ensure that affected persons

			have reporting requirements for consumer products containing methylene chloride and perchloroethylene that are consistent with applicable compliance dates.
7360 E 2 e.		Specifies the accuracy with which the perchloroethylene or methylene chloride content that must be reported annually.	Amends the required reporting accuracy for perchloroethylene or methylene chloride content to 0.10%. Necessary to correct a typographical error.
7360 E 3.		Provides a reporting schedule for consumer products containing methylene chloride and perchloroethylene sold in calendar years between 2005 and 2010, inclusive.	Ties the reporting schedule to the compliance dates as they are amended in section 7330 and thereby provides a reporting schedule consistent with the new January 1, 2008 compliance date for affected persons in the newly applicable Richmond and Fredericksburg VOC Emissions Control Areas. Necessary to ensure that affected persons have reporting requirements for consumer products containing methylene chloride and perchloroethylene that are consistent with applicable compliance dates.
9 VAC 5, Chapter 40, Part II, Article 53			
7800 B.		Limits applicability of the regulation to sources and persons in the Northern Virginia and Richmond VOC Emissions Control Areas.	Broadens the applicability of the regulation so that the provisions are also applicable to sources in the Fredericksburg, Hampton Roads and Western VOC Emissions Control Areas. Necessary to attain and maintain the ozone air quality standards in the corresponding nonattainment areas.
7800 D.		Exempts small facilities (those with a potential to emit less than 100 tons of VOC per year) from the lithographic printing VOC emission standards in the Richmond VOC Emissions Control Area.	Exempts facilities with a potential to emit of 100 tons per year or less in <u>all</u> VOC emission control areas other than the Northern Virginia VOC Emissions Control Area. Necessary to add small facility exemptions for facilities in the recently promulgated Western VOC Emissions Control Area, in the new Fredericksburg VOC Emissions Control Area, and in the existing Hampton Roads VOC Emissions Control Area.
7880 B.		Provides a compliance date two years after April 1, 1996 for all affected facilities (which are limited to facilities in the Northern Virginia and Richmond VOC Emissions Control Areas).	Changes the compliance date to a firm date in the past (April 1, 1998) and specifies the areas in which the April 1, 1998 compliance date was applicable (the Northern Virginia and Richmond VOC Emissions Control Areas). Necessary to ensure that newly affected facilities in other VOC emissions control areas have time to comply with the provisions of this Article.
	7880 C.	None.	Provides for a firm compliance date (to be filled in later based upon the effective date of this amendment) for all newly affected facilities in VOC emission control areas other than the Northern Virginia and Richmond

		VOC Emissions Control Areas.
--	--	------------------------------

Regulatory Flexibility Analysis

Please describe the agency’s analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: (1) the establishment of less stringent compliance or reporting requirements; (2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; (3) the consolidation or simplification of compliance or reporting requirements; (4) the establishment of performance standards for small businesses to replace design or operational standards required in the proposal; and (5) the exemption of small businesses from all or any part of the requirements contained in the proposal.

Although the regulations apply to all facilities of the applicable source type, these standards were specifically designed to apply to facilities of the size that are now defined as small businesses. As such, any (1) establishment of less stringent compliance or reporting standards; (2) establishment of less stringent schedules or deadlines for compliance or reporting requirements; (3) consolidation or simplification of compliance or reporting requirements; (4) establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; or (5) exemption of small businesses from all or any part of the requirements contained in the proposed regulation for all small businesses would directly, significantly and adversely impact the benefits that would be achieved through the implementation of the existing regulations into the new nonattainment areas.

Legal Requirements

Please identify the state and/or federal source of the legal requirements that necessitate promulgation of the proposal, including: (1) the most relevant law and/or regulation, including Code of Virginia citation and General Assembly bill and chapter numbers, if applicable, and (2) promulgating entity, i.e., the agency, board, or person. Describe the legal requirements and the extent to which the requirements are mandatory or discretionary.

Promulgating Entity

The promulgating entity for this regulation is the State Air Pollution Control Board.

Identification of Specific Applicable Federal Requirements

Ozone is formed by complex series of reactions between nitrogen oxides (NOx) and volatile organic compounds (VOCs) under the influence of solar ultraviolet radiation (sunlight). Ozone shows a very strong diurnal (daily) and seasonal (April to October) cyclical character. Ozone injures vegetation, has adverse effects on materials (rubber and fabrics), and is a pulmonary irritant that affects respiratory mucous membranes, lung tissues, and respiratory functions.

The original ozone air quality standard that was the focus of air quality planning requirements after the promulgation of the 1990 Amendments to the Clean Air Act was a 1-hour standard. Since then, EPA has promulgated a new 8-hour ozone air quality standard, and associated designation of nonattainment areas, which necessitates the initiation of new plans and regulatory actions.

40 CFR Part 81 specifies the designations of areas made under § 107(d) of the CAA and the associated nonattainment classification (if any) under § 181 of the CAA or 40 CFR 51.903(a), as applicable. On April 30, 2004 (69 FR 23858), EPA published its final decision as to the 8-hour nonattainment areas and associated classifications. The new designations are effective June 15, 2004. The Commonwealth of Virginia designations are in 40 CFR 81.347.

40 CFR Part 51, Subpart X, contains the provisions for the implementation of the 8-hour ozone NAAQS, along with the associated planning requirements. On April 30, 2004 (69 FR 23951), EPA published phase 1 of its final rule adding Subpart X to 40 CFR Part 51. Specifically, 40 CFR 51.903(a) sets forth the classification criteria and nonattainment dates for 8-hour ozone nonattainment areas once they are designated as such under 40 CFR Part 81. The remainder of the planning requirements (phase 2) is expected to be promulgated by the fall of 2005.

The state regulations established VOC and NO_x emissions control areas to provide the legal mechanism to define the geographic areas in which Virginia implements control measures to attain and maintain the air quality standards for ozone. The emissions control areas may or may not coincide with the nonattainment areas, depending on the necessity of the planning requirements.

General Federal Requirements

Sections 109 (a) and (b) of the Clean Air Act (CAA) require EPA to prescribe primary and secondary air quality standards to protect public health and welfare, respectively, for each air pollutant for which air quality criteria were issued before the enactment of the 1970 Clean Air Act. These standards are known as the National Ambient Air Quality Standards (NAAQS). Section 109 (c) requires the U.S. Environmental Protection Agency (EPA) to prescribe such standards simultaneously with the issuance of new air quality criteria for any additional air pollutant. The primary and secondary air quality criteria are authorized for promulgation under § 108.

Once the NAAQS are promulgated pursuant to § 109, § 107(d) sets out a process for designating those areas that are in compliance with the standards (attainment or unclassifiable) and those that are not (nonattainment). Governors provide the initial recommendations but EPA makes the final decision. Section 107(d) also sets forth the process for redesignations once the nonattainment areas are in compliance with the applicable NAAQS.

Section 110(a) of the CAA mandates that each state adopt and submit to EPA a plan which provides for the implementation, maintenance, and enforcement of each primary and secondary air quality standard within each air quality control region in the state. The state implementation plan shall be adopted only after reasonable public notice is given and public hearings are held. The plan shall include provisions to accomplish, among other tasks, the following:

(1) establish enforceable emission limitations and other control measures as necessary to comply with the provisions of the CAA, including economic incentives such as fees, marketable permits, and auctions of emissions rights;

(2) establish schedules for compliance;

(3) prohibit emissions which would contribute to nonattainment of the standards or interference with maintenance of the standards by any state; and

(4) require sources of air pollution to install, maintain, and replace monitoring equipment as necessary and to report periodically on emissions-related data.

40 CFR Part 50 specifies the NAAQS: sulfur dioxide, particulate matter, carbon monoxide, ozone (its precursors are nitrogen oxides and volatile organic compounds), nitrogen dioxide, and lead.

40 CFR Part 51 sets out requirements for the preparation, adoption, and submittal of state implementation plans. These requirements mandate that any such plan shall include several provisions, including those summarized below.

Subpart G (Control Strategy) specifies the description of control measures and schedules for implementation, the description of emissions reductions estimates sufficient to attain and maintain the standards, time periods for demonstrations of the control strategy's adequacy, an emissions inventory, an air quality data summary, data availability, special requirements for lead emissions, stack height provisions, and intermittent control systems.

Subpart K (Source Surveillance) specifies procedures for emissions reports and record-keeping, procedures for testing, inspection, enforcement, and complaints, transportation control measures, and procedures for continuous emissions monitoring.

Subpart L (Legal Authority) specifies the requirements for legal authority to implement plans.

Section 51.230 under Subpart L specifies that each state implementation plan must show that the state has the legal authority to carry out the plan, including the authority to perform the following actions:

- (1) adopt emission standards and limitations and any other measures necessary for the attainment and maintenance of the national ambient air quality standards;
- (2) enforce applicable laws, regulations, and standards, and seek injunctive relief;
- (3) abate pollutant emissions on an emergency basis to prevent substantial endangerment to the health of persons;
- (4) prevent construction, modification, or operation of a facility, building, structure, or installation, or combination thereof, which directly or indirectly results or may result in emissions of any air pollutant at any location which will prevent the attainment or maintenance of a national standard;
- (5) obtain information necessary to determine whether air pollution sources are in compliance with applicable laws, regulations, and standards, including authority to require record-keeping and to make inspections and conduct tests of air pollution sources;
- (6) require owners or operators of stationary sources to install, maintain, and use emission monitoring devices and to make periodic reports to the state on the nature and amounts of emissions from such stationary sources; and
- (7) make emissions data available to the public as reported and as correlated with any applicable emission standards or limitations.

Section 51.231 under Subpart L requires the identification of legal authority as follows:

- (1) the provisions of law or regulation which the state determines provide the authorities required under this section must be specifically identified, and copies of such laws or regulations must be submitted with the plan; and
- (2) the plan must show that the legal authorities specified in this subpart are available to the state at the time of submission of the plan.

Subpart N (Compliance Schedules) specifies legally enforceable compliance schedules, final compliance schedule dates, and conditions for extensions beyond one year.

Part D describes how nonattainment areas are established, classified, and required to meet attainment. Subpart 1 provides the overall framework of what nonattainment plans are to contain, while Subpart 2 provides more detail on what is required of areas designated nonattainment for ozone.

Section 171 defines "reasonable further progress," "nonattainment area," "lowest achievable emission rate," and "modification."

Section 172(a) authorizes EPA to classify nonattainment areas for the purpose of assigning attainment dates. Section 172(b) authorizes EPA to establish schedules for the submission of plans designed to achieve attainment by the specified dates. Section 172(c) specifies the provisions to be included in each attainment plan, as follows:

- (1) the implementation of all reasonably available control measures as expeditiously as practicable and shall provide for the attainment of the national ambient air quality standards;
- (2) the requirement of reasonable further progress;
- (3) a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutants in the nonattainment area;
- (4) an identification and quantification of allowable emissions from the construction and modification of new and modified major stationary sources in the nonattainment area;
- (5) the requirement for permits for the construction and operations of new and modified major stationary sources in the nonattainment area;
- (6) the inclusion of enforceable emission limitations and such other control measures (including economic incentives such as fees, marketable permits, and auctions of emission rights) as well as schedules for compliance;
- (7) if applicable, the proposal of equivalent modeling, emission inventory, or planning procedures;
and
- (8) the inclusion of specific contingency measures to be undertaken if the nonattainment area fails to make reasonable further progress or to attain the national ambient air quality standards by the attainment date.

Section 172(d) requires that attainment plans be revised if EPA finds inadequacies. Section 172(e) authorizes the issuance of requirements for nonattainment areas in the event of a relaxation of any national ambient air quality standard. Such requirements shall provide for controls which are not less stringent than the controls applicable to these same areas before such relaxation.

Section 107(d)(3)(D) provides that a state may petition EPA to redesignate a nonattainment area as attainment and EPA may approve the redesignation subject to certain criteria being met. Section 107(d)(3)(E) stipulates one of these criteria, that EPA must fully approve a maintenance plan that meets the requirements of § 175A.

According to § 175A(a), the maintenance plan must be part of a SIP submission, and must provide for maintenance of the NAAQS for at least 10 years after the redesignation. The plan must contain any additional measures, as needed, to ensure maintenance. Section 175A(b) further requires that 8 years after redesignation, a maintenance plan for the next 10 years must then be submitted. As stated in § 175A(c), nonattainment requirements continue to apply until the SIP submittal is approved. Finally, § 175A(d) requires that the maintenance plan contain contingency provisions which will be implemented should the area fail to maintain the NAAQS as provided for in the original plan.

Under Part D, Subpart 2, § 181 sets forth the classifications and nonattainment dates for 1-hour ozone nonattainment areas once they are designated as such under § 107(d).

Section 182(a)(2)(A) requires that the existing regulatory program requiring reasonably available control technology (RACT) for stationary sources of volatile organic compounds (VOCs) in marginal nonattainment areas be corrected by May 15, 1991, to meet the minimum requirements in existence prior to the enactment of the 1990 amendments. RACT is the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. EPA has published control technology guidelines (CTGs) for various types of sources, thereby defining the minimum acceptable control measure or RACT for a particular source type.

Section 182(b) requires stationary sources in moderate nonattainment areas to comply with the requirements for sources in marginal nonattainment areas. The additional, more comprehensive control measures in §182(b)(2)(A) require that each category of VOC sources employ RACT if the source is covered by a CTG document issued between enactment of the 1990 amendments and the attainment date for the nonattainment area. Section 182(b)(2)(B) requires that existing stationary sources emitting VOCs for which a CTG existed prior to adoption of the 1990 amendments also employ RACT.

Section 182(c) requires stationary sources in serious nonattainment areas to comply with the requirements for sources in both marginal and moderate nonattainment areas.

Section 182(d) requires stationary sources in severe nonattainment areas to comply with the requirements for sources in marginal, moderate and serious nonattainment areas.

Section 182(f) extends the requirements for the control of VOC emissions to emissions of NOx.

40 CFR Part 81 specifies the designations of areas made under § 107(d) of the CAA and the associated nonattainment classification (if any) under § 181 of the CAA or 40 CFR 51.903(a), as applicable.

EPA has issued detailed guidance that sets out its preliminary views on the implementation of the air quality planning requirements applicable to nonattainment areas. This guidance is titled the "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990" (or "General Preamble"). See 57 FR 13498 (April 16, 1992) and 57 FR 18070 (April 28, 1992). The General Preamble has been supplemented with further guidance on Title I requirements. See 57 FR 55621 (Nov. 25, 1992) (guidance on NOx RACT requirements in ozone nonattainment areas). For this subject, the guidance provides little more than a summary and reiteration of the provisions of the Act.

On June 21, 2001, EPA issued formal guidelines for the "Ozone Flex Program." These guidelines set out eligibility requirements, what measures may be taken and how localities, states and EPA are to develop and implement early reduction plans. On November 14, 2002, EPA issued a schedule for 8-hour ozone designations and its effect on early action compacts for potential 8-hour nonattainment areas.

40 CFR Part 51, Subpart X, contains the provisions for the implementation of the 8-hour ozone NAAQS, along with the associated planning requirements. Specifically, 40 CFR 51.903(a) sets forth the classification criteria and nonattainment dates for 8-hour ozone nonattainment areas once they are designated as such under 40 CFR Part 81.

State Requirements

These specific amendments are not required by state mandate. Rather, Virginia's Air Pollution Control Law gives the State Air Pollution Control Board the discretionary authority to promulgate regulations "abating, controlling and prohibiting air pollution throughout or in any part of the Commonwealth" (§ 10.1-1308). The law defines such air pollution as "the presence in the outdoor atmosphere of one or more substances which are or may be harmful or injurious to human health, welfare or safety, to animal or plant

life, or to property, or which unreasonably interfere with the enjoyment by the people or life or property" (§ 10.1-1300).

Need

Please explain the need for the new or amended regulation and the potential consequences that may result in the absence of the regulation. Detail the specific reasons the regulation is essential to protect the health, safety or welfare of citizens. Discuss the goals of the proposal, environmental benefits of the proposal, and the problems the proposal is intended to solve.

Identification of Specific Planning Requirements Establishing the Need

Ozone is formed by complex series of reactions between nitrogen oxides (NO_x) and volatile organic compounds (VOCs) under the influence of solar ultraviolet radiation (sunlight). Ozone shows a very strong diurnal (daily) and seasonal (April to October) cyclical character. Ozone injures vegetation, has adverse effects on materials (rubber and fabrics), and is a pulmonary irritant that affects respiratory mucous membranes, lung tissues, and respiratory functions.

The original ozone air quality standard that was the focus of air quality planning requirements after the promulgation of the 1990 Amendments to the Clean Air Act was a 1-hour standard. Since then, EPA has promulgated a new 8-hour ozone air quality standard. Air quality planning efforts to address compliance with the new 8-hour standard are in the early stages. On April 15, 2004, EPA has promulgated its decision as to the 8-hour nonattainment areas and some of the planning requirements, but the final decision regarding the remainder of the planning requirements will not be made known until mid-August 2004. The state regulations established VOC and NO_x emissions control areas to provide the legal mechanism to define the geographic areas in which Virginia implements control measures to attain and maintain the air quality standards for ozone. The emissions control areas may or may not coincide with the nonattainment areas, depending on the necessity of the planning requirements.

Three areas of Virginia were originally established as VOC and NO_x emissions control areas: Northern Virginia, Hampton Roads, and Richmond. These three VOC and NO_x emissions control areas were established in order to implement control measures to attain the 1-hour ozone air quality standard. The Northern Virginia area remains out of compliance with the 1-hour standard and designated nonattainment for the 1-hour ozone standard; the area was recently reclassified to a severe classification. Furthermore, it was designated nonattainment for the 8-hour ozone standard. However, both the Hampton Roads and Richmond areas are in compliance with the 1-hour standard and are designated maintenance areas but were also designated nonattainment for the 8-hour standard. Promulgation of the 8-hour nonattainment areas resulted in some additional nonattainment areas as follows: Frederick County area, Fredericksburg area, and Roanoke area.

The Northern Virginia VOC and NO_x Emissions Control Area currently consists of the counties of Arlington, Fairfax, Loudoun, Prince William, and Stafford; and the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park. No localities need to be added to the area as a result of the promulgation of the 8-hour ozone nonattainment areas. The Richmond VOC and NO_x Emissions Control Area currently consists of the counties of Charles City, Chesterfield, Hanover, and Henrico; and the cities of Colonial Heights, Hopewell, and Richmond. The following new localities need to be added to the area as a result of the promulgation of the 8-hour ozone nonattainment areas: Petersburg City and Prince George County. The Hampton Roads VOC and NO_x Emissions Control Area currently consists of the counties of James City and York; and the cities of Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg. The following new localities need to be added to the area as a result of the promulgation of the 8-hour ozone nonattainment areas: Gloucester County and Isle of Wight County.

Recently, a new VOC and NOX emissions control area was established: the Western Virginia Area. This area was designated nonattainment for the 8-hour ozone standard but was added to the list of VOC and NOx emissions control areas prior to EPA's final decision regarding the 8-hour nonattainment areas. This was done so the affected localities could participate in EPA's Early Action Compact program. The Western Virginia VOC and NOx Emissions Control Area includes the counties of Botetourt, Frederick and Roanoke; and the cities of Roanoke, Salem, and Winchester.

One more VOC and NOx emissions control area will need to be established: the Fredericksburg Area. This area was designated nonattainment for the 8-hour ozone standard. The Fredericksburg VOC and NOx Emissions Control Area would include Spotsylvania County and Fredericksburg City.

Thus, the amendment of the regulations is to expand the applicability of the VOC and NOx regulatory program into the new 8-hour nonattainment areas. For the areas that have been designated nonattainment for the 8-hour ozone standard, the amendment of the rule is to make legally enforceable several control measures to be included plans for the attainment and maintenance of the ozone air quality standard in those areas. This regulatory action is thus essential to protect the health, safety, and welfare of citizens.

General Planning Requirements

Among the primary goals of the federal Clean Air Act are the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and the prevention of significant deterioration (PSD) of air quality in areas cleaner than the NAAQS.

The NAAQS, developed and promulgated by the U.S. Environmental Protection Agency (EPA), establish the maximum limits of pollutants that are permitted in the outside ambient air. EPA requires that each state submit a plan (called a State Implementation Plan or SIP), including any laws and regulations necessary to enforce the plan, that shows how the air pollution concentrations will be reduced to levels at or below these standards (attainment). Once the pollution levels are within the standards, the SIP must also demonstrate how the state will maintain the air pollution concentrations at the reduced levels (maintenance).

The PSD program is designed to protect air quality in areas where the air is cleaner than required by the NAAQS. The program has three classifications for defining the level of allowable degradation: Class I is the most stringent classification, allowing for little additional pollution, while Class III allows the most. All of Virginia is classified at the moderate level, Class II, with the exception of two Class I federal lands.

A SIP is the key to the state's air quality programs. The Clean Air Act is specific concerning the elements required for an acceptable SIP. If a state does not prepare such a plan, or EPA does not approve a submitted plan, then EPA itself is empowered to take the necessary actions to attain and maintain the air quality standards--that is, it would have to promulgate and implement an air quality plan for that state. EPA is also, by law, required to impose sanctions in cases where there is no approved plan or the plan is not being implemented, the sanctions consisting of loss of federal funds for highways and other projects and/or more restrictive requirements for new industry. Generally, the plan is revised, as needed, based upon changes in the federal Clean Air Act and associated EPA regulations and policies.

The basic approach to developing a SIP is to examine air quality across the state, delineate areas where air quality needs improvement, determine the degree of improvement necessary, inventory the sources contributing to the problem, develop a control strategy to reduce emissions from contributing sources enough to bring about attainment of the air quality standards, implement the strategy, and take the steps necessary to ensure that the air quality standards are not violated in the future.

The heart of the SIP is the control strategy. The control strategy describes the emission reduction measures to be used by the state to attain and maintain the air quality standards. There are three basic types of measures: stationary source control measures, mobile source control measures, and transportation source control measures. Stationary source control measures are directed at limiting

emissions primarily from commercial/industrial facilities and operations and include the following: emission limits, control technology requirements, preconstruction permit programs for new industry and expansions, and source-specific control requirements. Stationary source control measures also include area source control measures which are directed at small businesses and consumer activities. Mobile source control measures are directed at tailpipe and other emissions primarily from motor vehicles and include the following: Federal Motor Vehicle Emission Standards, fuel volatility limits, reformulated gasoline, emissions control system anti-tampering programs, and inspection and maintenance programs. Transportation source control measures limit the location and use of motor vehicles and include the following: carpools, special bus lanes, rapid transit systems, commuter park and ride lots, bicycle lanes, signal system improvements, and many others.

Federal guidance on states' approaches to the inclusion of control measures in the SIP has varied considerably over the years, ranging from very general in the early years of the Clean Air Act to very specific in more recent years. Many regulatory requirements were adopted in the 1970s when no detailed guidance existed. The legally binding federal mandate for these regulations is general, not specific, consisting of the Clean Air Act's broad-based directive to states to attain and maintain the air quality standards. However, in recent years, the Clean Air Act, along with EPA regulations and policy, has become much more specific, thereby removing much of the states' discretion to craft their own air quality control programs.

Generally, a SIP is revised, as needed, based upon changes in air quality or statutory requirements. For the most part the SIP has worked, and the standards have been attained for most pollutants in most areas. However, attainment of NAAQS for one pollutant--ozone--has proven problematic. While ozone is needed at the earth's outer atmospheric layer to shield out harmful rays from the sun, excess concentrations at the surface have an adverse effect on human health and welfare. Ozone is formed by a chemical reaction between volatile organic compounds (VOCs), nitrogen oxides (NOx), and sunlight. When VOC and NOx emissions from mobile sources and stationary sources are reduced, ozone is reduced.

Congress enacted the 1977 Amendments to the Clean Air Act in order to address unsuccessful SIPs and areas that had not attained the NAAQS (that is, nonattainment areas). Although SIP revisions submitted pursuant to the requirements of the 1977 amendments did achieve some progress in eliminating nonattainment areas, some areas remained.

In 1990 Congress once again enacted comprehensive amendments to the Act to address SIP requirements for nonattainment areas. The new Act established a process for evaluating the air quality in each region and identifying and classifying each nonattainment area according to the severity of its air pollution problem. Nonattainment areas are classified as marginal, moderate, serious, severe and extreme. Marginal areas are subject to the least stringent requirements and each subsequent classification (or class) is subject to successively more stringent control measures. Areas in a higher classification of nonattainment must meet the mandates of the lower classifications plus the more stringent requirements of their class. In addition to the general SIP-related sanctions, nonattainment areas have their own unique sanctions. If a particular area fails to attain the federal standard by the legislatively mandated attainment date, EPA is required to reassign it to the next higher classification level (denoting a worse air quality problem), thus subjecting the area to more stringent air pollution control requirements. The Clean Air Act includes specific provisions requiring these sanctions to be issued by EPA if so warranted.

The new Act required EPA, based on the air quality data from each state, to propose geographic boundaries and pollution classification levels for all nonattainment areas to each state's governor. If states disagreed with EPA's proposals, they had the opportunity to propose different boundaries; however, EPA had the authority to make the final decision.

The process provided in the new Act yielded three nonattainment areas for Virginia for the 1-hour ozone air quality standard. The classifications for Virginia's nonattainment areas were marginal for the Hampton Roads Nonattainment Area, moderate for the Richmond Nonattainment Area, and serious for the

Northern Virginia Nonattainment Area. Since that time, air quality has improved in some areas. Richmond and Hampton Roads have achieved the 1-hour ozone standard and are now considered maintenance areas; that is specific strategies that were implemented must continue, however, no additional new requirements are necessary provided the areas do not measure ozone concentrations in levels high enough to reclassify them into nonattainment. Meanwhile, Northern Virginia continues to experience difficulty in attaining the 1-hour standard and remains a nonattainment area. Although initially classified as serious, the Northern Virginia Ozone Nonattainment Area is now classified as severe because it failed to attain the 1-hour ozone air quality standard by the legislatively mandated attainment date for serious areas.

The original ozone air quality standard that was the focus of air quality planning requirements after the promulgation of the 1990 Amendments to the Clean Air Act was a 1-hour standard (0.12 ppm). Since then, EPA has promulgated a new 8-hour ozone air quality standard (0.08 ppm). Air quality planning efforts to address compliance with the new 8-hour standard are in the early stages. On April 15, 2004, EPA promulgated its decision as to the 8-hour nonattainment areas and some of the planning requirements. Also, EPA hopes to finalize the remainder of the air quality planning requirements by mid-August 2004, so that states can begin to develop their implementation plans. Promulgation of the 8-hour nonattainment areas resulted in some additional areas (with classifications) as follows: Frederick County Nonattainment Area, Fredericksburg Nonattainment Area, and Roanoke Nonattainment Area. The Frederick County Nonattainment Area and Roanoke Nonattainment Area are classified as basic areas and the effective date of the nonattainment designation has been delayed because the affected localities volunteered to participate in the Early Action Compact program (see below). The Fredericksburg Nonattainment Area is classified moderate.

EPA has established the Early Action Compact program to allow areas that may potentially become designated nonattainment under the 8-hour ozone standard to voluntarily adopt local emission control programs to avoid air quality violations and the potential of mandated controls. By avoiding the nonattainment designation, these areas will avoid new source review for major sources, including the requirement to make offsets, and conformity review. These areas will also experience a reduction in ozone air pollution, and thus experience improved public health and welfare.

Once the nonattainment areas are defined, each state is then obligated to submit a SIP demonstrating how it will attain the air quality standards in each nonattainment area. First, the Act requires that certain specific control measures and other requirements be adopted and included in the SIP; a list of those that necessitates the adoption or modification of state regulations is provided below. In addition for moderate nonattainment areas, the state has to demonstrate that it would achieve a VOC emission reduction of 15% within 6 years of the base year. Finally for serious nonattainment areas, the SIP has to include an attainment demonstration by photochemical modeling (including annual emission reductions of 3% for years 7 to 9 beyond the base year) in addition to the 15% emission reduction demonstration. In cases where the specific control measures shown below are inadequate to achieve the emission reductions or attain the air quality standard, the state is obligated to adopt other control measures as necessary to achieve this end.

ALL AREAS

- correct existing VOC regulatory program (controls on certain sources identified in EPA control technology guidelines)
- requirement for annual statements of emissions from industries
- preconstruction review (permit) program for new industry and expansions (with variable major source definition, variable offset ratio for addition of new pollution, and special requirements for expansions to existing industry in serious areas)
- offset ratio for addition of new pollution of 1.1 to 1
- procedures to determine if systems level highway plans and other federally financed projects are in conformity with air quality plans

MODERATE AND ABOVE AREAS

- requirement for controls for all VOC sources identified in EPA control technology guidelines
- case by case control technology determinations for all major VOC and NOX sources not covered by a EPA control technology guideline
- requirement for controls for all major (100 tons per year) VOC sources
- requirement for controls for all major (100 tons per year) NOX sources
- offset ratio for addition of new pollution of 1.15 to 1
- requirement for vapor recovery controls for emissions from filling vehicles with gasoline (stage II)
- basic motor vehicle emissions inspection and maintenance program

SERIOUS AND ABOVE AREAS

- requirement for controls for all major (50 tons per year) VOC sources
- requirement for controls for all major (50 tons per year) NOX sources
- offset ratio for addition of new pollution of 1.2 to 1
- enhanced monitoring (source emissions) program
- correct existing motor vehicle emissions inspection and maintenance (I&M) program
- enhanced motor vehicle emissions I&M program
- clean fuel fleet vehicle program
- oxygenated fuels program

SEVERE AND ABOVE AREAS

- requirement for controls for all major (25 tons per year) VOC sources
- requirement for controls for all major (25 tons per year) NOX sources
- offset ratio for addition of new pollution of 1.3 to 1
- requirement for major sources to pay a penalty fee if area does not attain air quality standard by attainment date
- transportation control strategies and measures to offset emissions growth from VMT

Once an area is eligible to be redesignated as attainment, the state must submit to EPA an attainment demonstration and a maintenance plan for approval. The maintenance plan must contain controls and measures sufficient to ensure that the air quality of the area will be maintained for the next 10 year period while accommodating expected growth. The maintenance plan must also contain contingency measures that will be implemented should the area fail to maintain the ambient air quality standard using the control measures provided in the plan. Virginia has submitted, and EPA has approved, an attainment redesignation request and a maintenance plan for the Fredericksburg Nonattainment Area (70 FR 76165, December 23, 2005). Extension of some of the VOC control provisions of Chapter 40 into the Fredericksburg VOC Emissions Control Area was among the measures necessary to accommodate the maintenance plan, and is, therefore, required as a condition of EPA's approval of the redesignation of the Fredericksburg area as attainment.

Since the Richmond and Hampton Roads Ozone Nonattainment Areas have also met the air quality standards for necessary for redesignation, Virginia will be submitting a 10-year air quality maintenance plan to support redesignation requests for those areas. Accordingly, some of the VOC control and contingency measures have been determined to be necessary for implementation within the Richmond and Hampton Roads VOC Emissions Control Areas.

Impact on Family

Please assess the impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: (1) strengthen or erode the authority and rights

of parents in the education, nurturing, and supervision of their children; (2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; (3) strengthen or erode the marital commitment; and (4) increase or decrease disposable family income.

It is not anticipated that these regulation amendments will have a direct impact on families. However, there will be positive indirect impacts in that the regulation amendments will ensure that the Commonwealth's air pollution control regulations will function as effectively as possible, thus contributing to reductions in related health and welfare problems.

**COMMONWEALTH OF VIRGINIA
STATE AIR POLLUTION CONTROL BOARD
SUMMARY AND ANALYSIS OF PUBLIC TESTIMONY FOR
REGULATION REVISION D04
CONCERNING**

**VOC AND NOx EMISSIONS CONTROL AREAS
(9 VAC 5 CHAPTER 20)**

INTRODUCTION

At the June, 2005 meeting, the Board authorized the Department to promulgate for public comment a proposed regulation revision concerning VOC and NOx Emissions Control Areas.

A public hearing was advertised accordingly and held in Richmond on January 12, 2006 and the public comment period closed on January 30, 2006. The proposed regulation amendments subject to the hearing are summarized below followed by a summary of the public participation process and an analysis of the public testimony, along with the basis for the decision of the Board.

SUMMARY OF PROPOSED AMENDMENTS

The proposed regulation amendments concerned provisions covering VOC and NOx Emissions Control Areas. A summary of the amendments follows:

1. The VOC and NOx emissions control areas designated in 9 VAC 5-20-206 are being amended so that those regulations that are used to enforce control measures designed to attain the ozone air quality standard are implemented within the new ozone nonattainment areas. A new Fredericksburg VOC and NOx Emissions Control Area is being created that consists of the County of Spotsylvania and the City of Fredericksburg. The Richmond VOC and NOx Emissions Control Areas are being expanded to include the County of Prince George and the City of Petersburg. The Hampton Roads VOC and NOx Emissions Control Areas are being expanded to include the counties of Gloucester and Isle of Wight.

2. Many of the Chapter 40 VOC emission standards will be extended into the new 8-hour nonattainment areas automatically when the VOC emissions control areas in 9 VAC 5-20-206 are amended. For new affected facilities subject to these rules, compliance with the VOC emission standards is automatically required by 9 VAC 5-40-20 to be achieved no later than 90 days after the effective date of the amendment except for sources that require certain physical or process changes to comply, in which case compliance is required no later than one year after the effective date of the amendment. These automatically extended rules include:

- Article 5 Synthesized Pharmaceutical Products Manufacturing Operations
- Article 6 Rubber Tire Manufacturing Operations

Article 11	Petroleum Refinery Operations
Article 24	Solvent Metal Cleaning Operations Using Non-Halogenated Solvents
Article 25	Volatile Organic Compound Storage and Transfer Operations
Article 26	Large Appliance Coating Application Systems
Article 27	Magnet Wire Coating Application Systems
Article 28	Automobile and Light Duty Truck Coating Application Systems
Article 29	Can Coating Application Systems
Article 30	Metal Coil Coating Application Systems
Article 31	Paper and Fabric Coating Application Systems
Article 32	Vinyl Coating Application Systems
Article 33	Metal Furniture Coating Application Systems
Article 34	Miscellaneous Metal Parts and Products Coating Application Systems
Article 35	Flatwood Paneling Coating Application Systems
Article 37	Petroleum Liquid Storage and Transfer Operations
Article 39	Asphalt Paving Operations

3. Other Chapter 40 regulations are being amended to apply (or not apply) within the appropriate VOC emissions control areas:

Chapter 40, Article 4 is being amended to ensure that VOC RACT is not automatically required of all large VOC sources in the new areas that were included in Richmond VOC Emissions Control Area to make it correspond with the expanded Richmond (marginal) 8-hour Ozone Nonattainment Area.

Chapter 40, Article 36 is being amended to provide exemptions for small publication and packaging printing rotogravure, and flexographic printing operations with a potential to emit less than 100 tons of VOC per year within all VOC emissions control areas other than the Northern Virginia VOC Emissions Control Area instead of just in the Richmond and Hampton Roads VOC Emissions Control Areas.

Chapter 40, Article 42 (Portable Fuel Containers), Article 48 (Mobile Equipment Repair and Refinishing), Article 49 (Architectural and Industrial Maintenance Coatings), and Article 50 (Consumer Products) are being amended so that the provisions also apply in the Richmond VOC Emissions Control Area and in the new Fredericksburg VOC Emissions Control Area instead of just in the Northern Virginia VOC Emissions Control Area.

Chapter 40, Article 53 is being amended to apply to lithographic printing operations in all VOC emissions control areas instead of just in the Northern Virginia and Richmond VOC Emissions Control Areas. The regulation is also being amended to provide exemptions for small facilities with a potential to emit less than 100 tons of VOC per year in the newly applicable VOC emissions control areas (i.e. the Hampton Roads, Western and Fredericksburg VOC Emissions Control Areas).

The 90-day/one-year compliance schedule of 9 VAC 5-40-20 also applies to new affected facilities that are being made subject to VOC emission standards under Articles 36. Persons affected by the extension of the provisions of Articles 42, 48, 49, and 50 to the Richmond and Fredericksburg VOC Emission Control Areas must comply by January 1, 2008. Compliance for affected facilities now subject to VOC emission standards under Article 53 will be required no later than one year after the effective date of the amendment.

SUMMARY OF PUBLIC PARTICIPATION PROCESS

A public hearing was held in Richmond, Virginia on January 12, 2006. Two persons attended the hearing, with both of those offering testimony; and two additional sets of written comments were received during the public comment period. As required by law, notice of this hearing was given to the public on or about November 28, 2005 in the Virginia Register and in six major newspapers (one in each area disproportionately affected) throughout the Commonwealth. In addition, personal notice of this hearing

and the opportunity to comment was given by mail to those persons on the Department's list to receive notices of proposed regulation revisions. A list of hearing attendees and the complete text or an account of each person's testimony is included in the hearing report which is on file at the Department.

ANALYSIS OF TESTIMONY

Below is a summary of each person's testimony and the accompanying analysis. Included is a brief statement of the subject, the identification of the commenter, the text of the comment and the Board's response (analysis and action taken). Each issue is discussed in light of all of the comments received that affect that issue. The Board has reviewed the comments and developed a specific response based on its evaluation of the issue raised. The Board's action is based on consideration of the overall goals and objectives of the air quality program and the intended purpose of the regulation.

1. **SUBJECT:** Extending the applicability of Stage II vapor recovery requirements into the city of Petersburg and Prince George County.

COMMENTER: Michael Ward, Virginia Petroleum Council

TEXT: Estimated costs per ton of emission reductions (\$2400) are underestimated in the proposed regulations. True costs per ton ... [are] \$6,718 in 2007 rising to \$14,206 in 2017. Stage II is a redundant technology with Onboard Refueling Vapor Recovery [ORVR] canisters which have been required on new vehicles since 1998. Staff should consider that the proposed regulations are more stringent than the Clean Air Act requires. Additionally, the EPA has a formal statement that Stage II is not required in Moderate areas. We are not aware of any other state choosing to expand Stage II recovery requirements largely because there are an ever increasing number of vehicles with ORVR. There is already precedent within these proposed regulations to treat the Petersburg and Prince George County localities as separate from the Richmond Emissions Control Area: Article 4: Emission Standards for General Process Operations (Rule 4-4), 9 VAC 5-40-300, states that no facilities which have a theoretical potential to emit 100 tons per year or more are to emit VOC emissions in excess of that resultant from using reasonably available control technology. But the proposed amendment states that *"For the purposes of this section only, the Richmond Emissions Control Area does not include Prince George County and Petersburg City."* I would offer a solution to the concerns expressed by my oral and written comments with a simple amendment to the proposed regulations: Under Part II- *Air Quality Programs* in 9 VAC 5-20-206, remove Petersburg and Prince George County from the listing of the Richmond Emissions Control Area and add another new area called the *Petersburg Emissions Control Area*. Then list Prince George County along with the City Petersburg in that area.

RESPONSE: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

2. **SUBJECT:** Applicability of Stage I vapor recovery requirements in the new Fredericksburg VOC Emissions Control Area.

COMMENTER: Michael Ward, Virginia Petroleum Council

TEXT: In light of the EPA's redesignation of the Fredericksburg nonattainment area to "attainment" status as reported in The Federal Register/ Volume 70, No.246, December 23, 2005, it does not appear necessary to require Stage I controls in that region as proposed in the regulations.

RESPONSE: In conjunction with Virginia's request for redesignation of the Fredericksburg nonattainment area, Virginia was required to submit an air quality maintenance plan to EPA to ensure that the area maintains their improved air quality. After consideration of the alternatives and review and approval by local air quality planning organizations, Stage I vapor recovery requirements were included among those control measures proposed for that area. EPA approved Virginia's maintenance plan for that area as part of the Fredericksburg Ozone Nonattainment Area redesignation (Federal Register, Volume 70, No.246, December 23, 2005). Therefore, even though the area has been redesignated as attainment, it will be subject to Stage I vapor recovery requirements (as well as other applicable VOC regulations in 9 VAC 5 Chapter 40). No changes have been made to the proposed regulation based upon this comment.

3. **SUBJECT:** Implementation of VOC regulations within the new VOC emissions control areas.

COMMENTER: Michael O'Connor, Petroleum Convenience and Grocery Association

TEXT: This proposed regulation is inappropriate and we oppose it. EPA states that an Air Quality Index value of 100 generally corresponds to the standard for a pollutant. When the Air Quality Index value is greater than 100, the air quality is considered unhealthy. When the Air Quality Index value is less than 100, the air quality is satisfactory. In 2005 throughout the Commonwealth, there has been no exceedance greater than 100 parts per billion (ppb). The highest was 94 ppb. If the federal government is classifying 100 as the standard, why is DEQ classifying exceedances as greater than 84 ppb? And why is the DEQ doing it in spite of a clear pattern that those "exceedances" above 84 ppb are decreasing?

RESPONSE: The Air Quality Index is a normalized index for which a unitless value of 100 corresponds to the primary standard for that pollutant. For ozone, the 8-hour primary standard of 84 ppb corresponds to an Air Quality Index value of 100. It is a pattern of exceedances of the 84 ppb primary ozone standard, not the Air Quality Index that is the criteria by which EPA and Virginia have determined that certain areas in Virginia are to be classified as nonattainment.

See the response to comment 2. In order to maintain improvements in air quality, the Department anticipates submitting a maintenance plan as a part of any future redesignation request. Appropriate additional control and contingency measures will be included as part of that submittal. No changes have been made to the proposed regulation based upon this comment.

4. **SUBJECT:** Extending the applicability of Stage II vapor recovery requirements into the city of Petersburg and Prince George County.

COMMENTER: Dan Horton, ExxonMobil Refining and Supply Company

TEXT: With the installation of Onboard Refueling Vapor Recovery equipment (ORVR) in automobiles the VOC emission reductions attributable to Stage II has diminished every year. The ORVR system supersedes the emission controls of a Stage II system, essentially making a Stage II system installation at a gasoline distribution facility unneeded. The US EPA is currently preparing to issue guidance wherein all ozone nonattainment areas can completely remove the requirement for Stage II in favor of the more effective and national ORVR system requirements. In light of that, it would appear that the Department's proposal to expand Stage II coverage to new areas would provide no significant environmental benefit. In reviewing the supporting information in the proposal intended to demonstrate the costs of installing Stage II systems in existing gasoline dispensing facilities, the proposal fails to incorporate all appropriate costs such as maintenance and testing costs. It also underestimates the installation costs. This inaccuracy severely skews the cost per ton of VOC emission reduction, making the requirement appear to be much more cost effective than it really is. When accurate cost data is used with the diminishing effectiveness of the Stage II system due to QRVR fleet penetration, the cost per ton of VOC

emission reduction makes this proposal a very inefficient and uncompetitive method for reducing VOC emission in Petersburg and Prince George County. Under CAA Sec.202 (a)(6) "The requirements of section 182(b)(3) (relating to Stage II gasoline vapor recovery) for areas classified under section 181 as moderate for ozone shall not apply after promulgation of such (ORVR) standards..." ORVR standards have been promulgated by the US EPA and phase in began with light duty vehicles in 1998. By 2008, all gasoline powered passenger vehicles less than 10,000 pounds will be equipped with ORVR. Therefore, under federal air quality rules, there is no federal requirement for the Department to promulgate this expansion of Stage II. ExxonMobil supports Mr. Ward's alternative proposal wherein he proposes that Part II-Air Quality Programs in 9 VAC 5-20-206 be amended to remove Petersburg and Prince George County from inclusion in the Richmond Emissions Control Area and establishment of a new and separate control area entitled Petersburg Emission Control Area.

RESPONSE: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

5. **SUBJECT:** 9 VAC 5 Chapter 40, Article 50 Consumer Products regulation's definition of "automotive windshield washer fluid."

COMMENTER: Alan Fankhanel, Mercantile Development, Inc.

TEXT: We request that the Commonwealth of Virginia Department of Environmental Quality modify the definition of "Automotive Windshield Washer Fluid" so that "Wet Towel" may be regulated for the specialty automotive purpose for which it is designed. Consumers purchase Wet Towel almost exclusively from outdoor vending machines at self-service car washes for use at the car wash and to store in vehicles for emergency cleaning of exterior and interior automotive windshields, headlights, and mirrors. Under Table 4-50A of the Regulations, the VOC limit applicable to automotive windshield washer fluids is 35% while the limit for non-aerosol glass cleaners and general purpose cleaners is 4%. Under an agreement with California, a State with similar VOC consumer product standards, MDI has reformulated Wet Towel to conform to the lower limit applicable to glass and general purpose cleaners. However, this reformulated product is not appropriate for use in Virginia, since at a VOC level of 4% the Wet Towel freezes at a temperature of approximately 30°F. Because of the colder climate, the reformulated product purchased from an outdoor vending machine would either be unusable or would cause frosting, and consequent visibility impairment, upon application under conditions that are likely to occur for several months of the year. In an agreement with several OTC states, MDI has reformulated Wet Towel to a VOC content of up to 35% which correlates to a freezing point of approximately 5°F and adheres to the regulations of automotive windshield washer fluid. When the definitions of "glass cleaner" and "general purpose cleaner" are reviewed in regulatory context, it is apparent that Wet Towel was not intended to be included in either product category. Wet Towel is similar in formulation to other forms of automotive windshield washer fluids and is sold from car wash vending machines to serve the same purpose as other windshield washer fluids. Like those other fluids, Wet Towel must be formulated to avoid freezing at low temperatures. In the current regulatory definition, only the word "system" conflicts with interpreting Wet Towel as an automotive windshield washer fluid. We respectfully request the regulatory definition of windshield washer fluid be modified to read "any liquid designed for use in a motor vehicle windshield washer system, or in an auxiliary windshield washing device, either as an antifreeze or for the purpose of cleaning, washing, or wetting the windshield", or similar.

RESPONSE: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.